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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,994	07/10/2003	Ming-Chang Lee	LEE0011-US	1215
7590 11/15/2004			EXAMINER	
SHAW PITTMAN LLP 1650 TYSONS BOULEVARD MCLEAN, VA 22102			PAPE, ZACHARY	
			ART UNIT	PAPER NUMBER
			2835	

DATE MAILED: 11/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/615,994

Applicant(s)

LEE, MING-CHANG

Examiner

Zachary M. Pape

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7-10-2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The preliminary amendment submitted by the applicant on 7-10-2003 has been acknowledged. The amended claims have been examined on the merits below.
2. Applicant's election with traverse of species I in the reply filed on 10-21-2004 is acknowledged. The traversal is on the ground(s) that a through and complete search for species I would necessarily encompass a through and complete search for the non-elected species. This is found to be persuasive and the election has been withdrawn.

Specification

3. The disclosure is objected to because of the following informalities: specifically the term saw-toothed as applied to Figs 1-4b is used in a manner contrary to its accepted meaning, "having serrations: arranged or having parts arranged like the teeth of a saw.". Page 6, Lines 5-6 point to figure 4a element 251 as a saw-toothed elastic strip including a V-shaped strip, additionally, Page 6, Lines 6-7 point to figure 4b element 251 as a saw-toothed elastic strip including a U-shaped strip, finally, Page 6, Lines 9-10 point to figure 4c element 251 as a saw-toothed elastic strip including a plurality of V-shaped strips. Figure 4c clearly shows a saw-toothed elastic strip while figures 4a, and 4b do not. Applicant is required to correct the terminology in a manner consistent with its accepted meaning.

Additionally figures 2a and 4a show identical illustrations of the portable electronic apparatus, however Page 4 Lines 17-18 refers to figure 2a and reference element number 251 as a saw-toothed elastic strip but fails to further disclose the V-shaped strip as described on Page 6, Lines 5-6. Appropriate correction is required.

An art rejection on the merits follows. The term "saw-toothed" is interpreted by the examiner to be either "v shape strip" or "u shape strips" as described in the disclosure with respect to Figs. 1-4b.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the dovetail must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the

remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-10 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "saw-toothed" in claim 1 is used by the claim to mean either "v-shaped strip or u-shaped strip" as seen in Figs 1-4b, while the accepted meaning of saw-tooth is "having serrations: arranged or having parts arranged like the teeth of a saw." The term saw-toothed is being used in a manner contrary to its accepted meaning – appropriate correction is required.

Additionally claims 5 and 6 state “wherein the first saw-toothed elastic strip includes a V-shaped strip” and “wherein the first saw-toothed elastic strip includes a U-shaped strip” respectively. It is unclear whether the V-shaped and U-shaped strips are in addition to the saw-toothed elastic strip, or are integral to the strip itself.

– Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-4, 6-8, 10-16, 18 rejected under 35 U.S.C. 102(e) as being clearly anticipated by Hsieh (Patent # 6,751,089). With respect to claims 1 & 10, Hsieh teaches the use of a latch device (24) having a predetermined device (20) and housing (12), a support connecting to the housing (32), a latch (38), and a first u-shaped elastic strip (26, 30) with one end connecting to the support (32), and the other connecting to the latch (38).

With respect to claim 2, Hsieh teaches that the predetermined device is a keyboard (20).

With respect to claim 3, Hsieh illustrates in figures 5 and 6 the latch (24) sticking out from the housing latching the keyboard (20) (See: Col 2, Lines 45-49). Hsieh also teaches that the latch deforms the elastic strip when a force is applied to the latch and recovers to its original position when the force on the latch is removed. (Col 2, Lines 33-39).

With respect to claims 4, and 6, Hsieh teaches a second U-shaped elastic strip (28) having both ends of the strip respectively connecting to two corresponding ends of the first saw-toothed elastic strip, where both strips together form a closed loop.

With respect to claim 7, Hsieh illustrates in Fig 4 that the latch device (38) is formed integrally with the elastic strips.

With respect to claim 8, Hsieh illustrates in Fig 4 that the U-shaped elastic strip is disposed between the support (32) and the latch (38).

With respect to claim 11 & 18, Hsieh teaches the use of a latch device (24) having a predetermined device (20) and housing (12), a support connecting to the housing (32), a latch (38), and a first arc-shaped elastic strip (26, 30) with one end connecting to the support (32), and the other connecting to the latch (38).

With respect to claim 12, Hsieh teaches that the predetermined device is a keyboard (20).

With respect to claim 13, Hsieh illustrates in figures 5 and 6 the latch (24) sticking out from the housing latching they keyboard (20) (See: Col 2, Lines 45-49). Hsieh also teaches that the latch deforms the arc-shaped elastic strip when a force is applied to the

latch and recovers to its original position when the force on the latch is removed. (Col 2, Lines 33-39).

With respect to claim 14, Hsieh teaches a second U-shaped elastic strip (28) having both ends of the strip respectively connecting to two corresponding ends of the first saw-toothed elastic strip, where both strips together form a closed loop.

With respect to claim 15, Hsieh illustrates in Fig 4 that the latch device (38) is formed integrally with the arc-shaped elastic strips.

With respect to claim 16, Hsieh illustrates in Fig 4 that the arc-shaped elastic strip is disposed between the support (32) and the latch (38).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 9 & 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Hsieh in view of Collins et al. (Patent # 6,665,909). Hsieh teaches the use of a latch device (24) as applied to claim 1 & 13 above. Hsieh fails to teach the use of a dovetail as a means of fastening the support to the housing.

Collins et al. teaches the use of a dovetail connection between element 14 and element 12. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Hsieh with the teachings of

Collins et al. to create a fastening means which is more resilient and better able to support the downward forces that are applied to the latch and onto the keyboard.

11. Claim 5 is rejected under U.S.C. 103(a) as being unpatentable over Hsieh. Hsieh teaches the use of a latch device (24) as applied to claim 1 above. Hsieh fails to teach the use of a v-shaped strip. It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the u-shaped strip of Hsieh with a v-shaped strip. A v-shaped strip provides better flexibility and a lesser degree of resilience between the support member and the latch. One may decide that the resilience provided by the u-shaped elastic member may be undesirable in certain applications causing damage to the keyboard, latch, support or other members of the electrical device.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary M. Pape whose telephone number is 571-272-2201. The examiner can normally be reached Mon. - Thur. & every other Fri. (8:00am - 5:00pm).

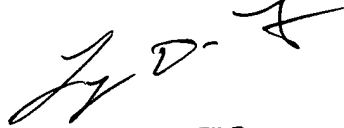
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached at 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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